

BONDED STRUCTURE USING REACTED BOROSILICATE MIXTURE

ABSTRACT OF THE DISCLOSURE

Environmental sensors and other bodies, together with associated lead wires, are mounted to a oxidizable substrate for high temperature applications by means of a reacted borosilicate mixture (RBM) that secures the body relative to the substrate via of an oxide interface formed between the RBM and substrate during a high temperature reaction process. An oxide interface is also formed with oxidizable bodies to provide further mounting strength. The RBM is a B_2O_3 - SiO_2 mixture, with the B_2O_3 portion a function of the reaction temperature and desired bonding strength and viscosity.

09783831-021401